

### REMARKS

In the aforementioned claim amendments, claims 1, 8 and 9 are amended. Now pending in the application are claims 1-13, of which claims 1, 8 and 9 are independent. The following comments address all stated grounds for rejection and place the presently pending claims, as identified above, in condition for allowance.

#### Claim Amendments

Applicants amend claims 1, 8 and 9 to clarify the scope of the claimed invention. Claims 1 and 9 are amended to recite that an inner seal and an outer seal are disposed, *on the same surface of said separator body* and side by side, around an electrode's reaction surface during use. Claim 8 is amended to recite that a second gate is separately formed from the first gate so as to directly communicate with the through hole *from the same side as the first gate*. Support for the claim amendments could be found in Figs. 3-10 and corresponding description in the Specification. No new matter is added.

#### Objections to Drawings

The drawings are objected to because of failing to designate Figs. 18-21 by a legend "Prior Art." In response to the objections, Applicants amend Fig. 18-21 to add a legend "Prior Art." In light of the amendment to the drawings, Applicants submit that the drawings are in condition for allowance.

#### Claim Rejections under 35 U.S.C. §102

Claims 1, 5-11 and 13 are rejected under 35 U.S.C. §102(e) as being anticipated by U.S. Patent No. 6,649,097 to Sasaki et al. ("Sasaki"). Applicants respectfully traverse this rejection for the following reasons.

Claims 1 and 9 recites a method for fabricating a seal-integrated separator for a fuel cell. The seal-integrated separator is fabricated to include an inner seal and an outer seal which are integrated on both sides of the separator body. The inner seal and the outer seal are disposed, *on the same surface of the separator body and side by*

*side*, around an electrode's reaction surface. The inner seal and the outer seal are connected to each other via a *seal bridge* at least partially at a position corresponding to the through hole formed in the separator body.

Applicants respectfully submit that the cited prior art reference fails to disclose each and every element of claim 1. First, Applicants submit that Sasaki fails to disclose that the inner seal and the outer seal are disposed, *on the same surface of the separator body and side by side*, around an electrode's reaction surface, as recited in claim 1. Sasaki discloses in Figs. 4-6 that a porous plain sheet (40) is provided with grooves (40a, 40b) on both sides of the sheet (40), respectively, which are connected to each other via a hole (40c), and sealing material is supplied into the groove (40a), then supplied into the groove (40b) via the hole (40c) to form gaskets (7, 8). Sasaki does not disclose the dual seals disposed on the same surface of the separator body and side by side.

Additionally, Applicants submit that Sasaki fails to disclose *a seal bridge at least partially connecting the inner seal to the outer body seal*, as recited in claim 1. Sasaki discloses a through hole (40c) that connects a groove (40a) to a groove (40b). In Sasaki, the grooves (40a, 40b) are connected to each other via the through hole (40c). In contrast, the claimed invention recites a seal bridge at least partially connecting the inner seal to the outer body seal. The claimed invention separately recites a through hole formed in the separator body that communicates with the seal bridge. The purpose of this positioning is to prevent degradation of sealing performance due to the through hole. Sasaki does not disclose a seal bridge at the position corresponding to the through hole.

In light of the claim amendments and the aforementioned arguments, Applicants submit that the Sasaki reference fails to disclose each and every element of claim 1. Applicants therefore request the Examiner withdraw the rejection of claims 1, 5-7, 9-11 and 13 and pass the claims to allowance.

Claims 8 recites a method for fabricating a seal-integrated separator for a fuel cell in which a first mold is provided with a first gate communicating with a groove formed in the first mold, and a second gate separately formed from the first gate so as

to directly communicate with a through hole formed in the separator body *from the same side as the first gate*.

Applicants submit that the Sasaki reference fails to disclose each and every element of claim 8. Applicants submit that the Sasaki reference fails to disclose that *the second gate is separately formed from the first gate so as to directly communicate with the through hole formed in the separator body from the same side as the first gate*, as recited in claim 8. Sasaki discloses a through hole (40c) that connects a groove (40a) to a groove (40b). Sasaki, however, does not disclose such a gate as communicates with the through hole (40c) directly, i.e., without having an intervening groove therebetween.

In light of the claim amendments and the aforementioned arguments, Applicants submit that the Sasaki reference fails to disclose each and every element of claim 8. Applicants therefore request the Examiner withdraw the rejection of claim 8 and pass the claim to allowance.

#### Claim Rejections under 35 U.S.C. §103

Claims 2-4 and 12 are rejected under 35 U.S.C. §103(a) as being unpatentable over the Sasaki reference in view of U.S. Patent No. 3,619,458 to Engelhardt ("Engelhardt"). Applicants respectfully traverse this rejection for the following reasons.

Claims 2-4 and 12 depends on claims 1 and 9 and add separate and patentable limitations to claims 1 and 9, respectively. For example, claim 2 adds to claim 1 the limitation that the melted seal material is separately supplied into each of the grooves corresponding to the inner and outer seals.

Applicants submit that cited references, in combination, fail to teach or suggest all of the limitations of claims 1 and 9. Applicants submit that Engelhardt fails to teach or suggest that *the inner seal and the outer seal are disposed, on the same surface of the separator body and side by side, around an electrode's reaction surface*, as recited in claims 1 and 9. Engelhardt teaches cylinders (11, 12) defined by

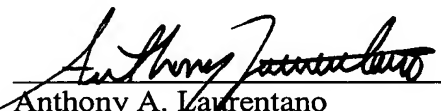
the shells (5, 6) and the counterplates (12, 13) in Fig. 3. Engelhard, however does not teach that the inner seal and the outer seal are disposed on the same surface of the separator body. Engelhardt further fails to teach a seal bridge that communicates with a through hole to allow sealing material to flow through the through hole. Moreover, Engelhardt does not teach anything about a separator of a fuel cell stack.

In light of the aforementioned arguments, Applicants submit that the cited references fail to teach or suggest all of the limitations of claims 1 and 9. Claims 2-4 and 12, which depend upon one of claims 1 and 9, are not rendered obvious over the cited references. Applicants therefore submit that the claims are in condition for allowance.

### CONCLUSION

For the foregoing reasons, Applicants contend that claims 1-13 are in condition for allowance. If there are any remaining issues, an opportunity for an interview is requested prior to the issuance of another Office Action. If the above amendments are not deemed to place this case in condition for allowance, the Examiner is urged to call Applicant's representative at the telephone number listed below.

Respectfully submitted,  
LAHIVE & COCKFIELD, LLP

  
Anthony A. Laurentano  
Registration No. 38,220  
Attorney for Applicant

28 State Street  
Boston, MA 02109  
(617) 227-7400  
(617) 742-4214  
Date: June 21, 2004